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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,951	01/11/2005	Noriyuki Matsukaze	FUJI:329	4879
37013 7590 12/28/2007 ROSSI, KIMMS & McDOWELL LLP. P.O. BOX 826 ASHBURN, VA 20146-0826			EXAMINER QUARTERMAN, KEVIN J	
			ART UNIT 2879	PAPER NUMBER
			MAIL DATE 12/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,951	Applicant(s) MATSUKAZE, NORIYUKI	
	Examiner Kevin Quarterman	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 31-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 31-36 is/are rejected.
- 7) ☒ Claim(s) 1,2,7-9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>0105; 0905; 0807</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-2, 7-9, and 14 are objected to because of the following informalities:

For consistency in the claims, each occurrence of "second substrate" should be preceded by the term "transparent" since the first recitation in the claims refers to a *transparent second substrate*. Also, in regards to independent claim 8, the term "an" preceding the term "peripheral" in the 17th line of the claim should be replaced with the term "a" instead. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-6, 9-13, and 31-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 2-5, 9-12, and 31-34 include recitations of the gap material having different void fractions. The phrase "void fractions" is not clearly defined in applicant's original disclosure. It is unclear as to what is *voided* in the gap material and what parameters make up the fraction. Therefore, the above recited claims are deemed indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claims 6 and 13, the phrase "such as" render the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed

invention. See MPEP § 2173.05(d). For examination purposes, the Examiner's interpretation of the claims is that any inorganic metal compound found in the prior art would read on the claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 6, 8, 13, 15, and 35-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada (US 6,833,668).

8. Regarding independent claim 1, Figure 7 of Yamada shows an organic multicolor emission and display device comprising a first substrate (1'); an organic light-emitting element including at least a first electrode (23), an organic light-emitting layer (5), and a transparent second electrode (25) laminated on the first substrate; a transparent second substrate (22); a color conversion filter layer (31) formed on the transparent second substrate, the color conversion filter layer receiving electroluminescence from the organic light-emitting layer and generating colored light; and a gap material (26) that positions the first substrate and the second substrate opposite to each other in such a way that the organic light-emitting element is opposite to the color conversion layer with a predetermined clearance (32), and that seals a space between the first substrate and

the second substrate, wherein the gap material is placed along an outer peripheral region on an inner surface of the first substrate, the organic light-emitting element being provided on the inner surface of the first substrate and the organic light-emitting element being absent on the outer peripheral region of the first substrate; and the gap material is placed also along an outer peripheral region on an inner surface of the second substrate, and the color conversion filter layer being provided on the inner surface of the second substrate, and the color conversion filter layer being absent on the outer peripheral region of the second substrate; and the gap material performs function to desiccate atmosphere of a sealed space between the first substrate and the second substrate (col. 9, ln. 34-43).

9. Regarding claim 6, Yamada discloses the gap material being composed of an inorganic compound represented by metal oxides (col. 13, ln. 24-32).

10. Regarding independent claim 8, Figure 7 of Yamada shows an organic multicolor emission and display device comprising a first substrate (1'); a transparent second substrate (22); a color conversion filter layer (31) formed on the transparent second substrate; an organic light-emitting element including at least a first electrode (23), an organic light-emitting layer (5), and a transparent second electrode (25), the light-emitting element being formed on the color conversion filter layer with the transparent second electrode facing the color conversion filter layer; and a gap material (26) that positions the first substrate and the second substrate opposite to each other in such a way that the organic light-emitting element is opposite to the first substrate with a predetermined clearance (3), and that seals a space between the first substrate and the

second substrate, wherein the gap material is placed along an outer peripheral region on an inner surface of the second substrate, functional layers including the color conversion filter layer and the organic light-emitting element being provided on the inner surface of the second substrate and the functional layers being absent on the outer peripheral region of the second substrate; and the gap material is placed also along a peripheral region on an inner surface of the first substrate, the peripheral region of the first substrate being opposite to the peripheral region of the inner surface of the second substrate; and the gap material performs function to desiccate atmosphere of a sealed space between the first substrate and the second substrate (col. 9, ln. 34-43).

11. Regarding claim 13, Yamada discloses the gap material being composed of an inorganic compound represented by metal oxides (col. 13, ln. 24-32).
12. Regarding claim 15, Figure 7 of Yamada shows a desiccant (14) attached on the inner surface of the first substrate.
13. Regarding claim 35, Figure 7 of Yamada shows a desiccant (14) attached on the inner surface of the first substrate.
14. Regarding claim 36, Figure 7 of Yamada shows a desiccant (14) attached on the inner surface of the first substrate.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 6,833,668).

17. Regarding claim 7 and 14, Yamada teaches the limitations of independent claims 1 and 8 discussed earlier in this office action but fails to exemplify the gap material having a thickness in a range of $1\mu\text{m}$ to $100\mu\text{m}$.

18. However, Yamada discloses a thickness of the gap material being approximately between $100\mu\text{m}$ and $500\mu\text{m}$ (col. 12, ln. 62-65). It has been held that a *prima facie* case of obviousness exists where the claimed ranges overlap or lie inside ranges disclosed by the prior art (MPEP § 2144.05). The Examiner notes that Yamada's disclosure of "approximately between $100\mu\text{m}$ and $500\mu\text{m}$ " allows for thicknesses slightly less than $100\mu\text{m}$, which overlaps applicant's claimed range of $1\mu\text{m}$ to $100\mu\text{m}$.

19. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the gap material of Yamada with a thickness in a range of $1\mu\text{m}$ to $100\mu\text{m}$ for reducing the thickness of the display device, since Yamada teaches a thickness that overlaps the claimed range.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cok (US 2003/0230972) discloses an organic electroluminescent display having color filters. Izumizawa (US 6,635,988) discloses an organic electroluminescent device with moisture prevention. McCormick (US 6,867,539)

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discloses an encapsulated organic electronic device. Schrank (US 4,839,557) discloses a fill member for electroluminescent panels.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Quarterman
Examiner
Art Unit 2879

kq

19 December 2007

TOANTON
PRIMARY PATENT EXAMINER